

CLAIMS

1. Process for the manufacture of 1,2-epoxy-3-chloropropane by reaction between allyl chloride and hydrogen peroxide in the presence of a catalyst comprising a zeolite and in the possible presence of at least one solvent in an epoxidation medium comprising at least one liquid phase, characterized in that the pH of the liquid phase is controlled and maintained at a value of greater than or equal to 1.5 and less than 4.8.
2. Process according to Claim 1, characterized in that the pH of the liquid phase is maintained at a value from 1.75 to 4.5.
3. Process according to Claim 2, characterized in that the pH of the liquid phase is maintained at a value from 2 to 4.2.
4. Process according to any one of Claims 1 to 3, characterized in that the allyl chloride employed comprises less than 2000 ppm of 1,5-hexadiene.
5. Process according to any one of claims 1 to 4, characterized in that the reaction is carried out at a temperature from 45 to 80°C.
6. Process according to any one of Claims 1 to 5, characterized in that the amounts of allyl chloride and hydrogen peroxide employed are such that their molar ratio is from 2 to 7.
7. Process according to any one of Claims 1 to 6, characterized in that the solvent comprises methanol.
8. Process according to any one of Claims 1 to 7, characterized in that the catalyst comprises TS-1.
9. Process according to any one of Claims 1 to 8, characterized in that the catalyst is present in the form of a fluid bed.
10. Process according to any one of Claims 1 to 9, characterized in that the reaction is carried out in a reactor of loop type comprising recirculation of the epoxidation medium.